

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NORTH CAROLINA
CHARLOTTE DIVISION

UNITED STATES OF AMERICA

DOCKET NO. 3:15CR 234-RJC

BILL OF INFORMATION

v.

Violations:

18 U.S.C. § 1832(a)(5)

XIWEN HUANG

THE UNITED STATES ATTORNEY CHARGES:

At the specified times and at all relevant times:

INTRODUCTION

1. Between in or about September 2006 and continuing through his arrest in May 2015, within the Western District of North Carolina and elsewhere, defendant XIWEN HUANG schemed and stole trade secrets from companies within the United States and intellectual property from the United States government, for his own benefit and the benefit of others, to further his aspirations of forming and operating his own company in the People's Republic of China ("China").

THE DEFENDANT

2. Defendant XIWEN HUANG was born in China, and received his Bachelors of Science and Master Degrees in Chemical Engineering from Tianjian University in China. In or about 1998, HUANG came to the United States to continue his studies, obtaining a doctorate in Chemical Engineering from Auburn University. From in or about 2004 until in or about 2014, HUANG worked for various companies within the United States, including a research facility operated by the United States Government, which served as a contractor for various federal

departments. During that time, in or about 2009, HUANG became a naturalized citizen of the United States of America.

OTHER INDIVIDUALS AND ENTITIES

3. Government Research Facility A is a research facility operated by a department of the United States government that served as a contractor for various federal departments, as well as for private industry. HUANG worked at Government Research Facility A from in or about 2004 until in or about 2008.

4. Company B is the U.S. affiliate of a multi-national chemical company. Among other things, Company B specializes in the development of vehicle and chemical catalyst technology. HUANG worked at Company B from in or about 2008 until in or about 2012.

5. Company C is a U.S. company, based in Charlotte, North Carolina, that specializes in the development of power plant catalyst technology. HUANG worked at Company C from in or about 2012 until he was fired for theft of trade secrets in 2014.

6. H&Z Technologies LLC ("H&Z") is a U.S. company incorporated by HUANG in North Carolina in or about August 2012, shortly after he began working at Company C. HUANG formed H&Z with unindicted coconspirators for the purpose of utilizing stolen confidential and proprietary information, including trade secret information, to do business in China and elsewhere.

7. Chinese Chemical Company D is a company headquartered in Shanghai, China that does business in the energy sector.

8. Handan Sinbo Catalyst Technology Company ("Handan-Sinbo") was an intended joint venture between H&Z and Chinese Company A created for the purpose of developing and selling in China catalyst technology and services.

TERMS AND DEFINITIONS

9. A Trade Secret is a form and/or type of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if (a) the owner thereof has taken reasonable measures to keep such information secret; and (b) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public.

10. A Catalyst is a substance that increases the rate of a chemical reaction without itself undergoing a permanent chemical change. Catalysts are used in a myriad of industries. In this matter, catalysts were used by Companies B and C to increase the yield of industrial chemicals and to convert and reduce the harmful emissions made by fossil fuel burning engines.

OVERVIEW OF HUANG'S SCHEME TO STEAL TRADE SECRETS

11. Prior to coming to the United States, and while an undergraduate student, HUANG wrote that he "had a dream of learning more advanced technology to serve [his] homeland" China and decided that to "fulfill [his] wish" he needed to go abroad and then "return to China with [his] newly acquired methodology and research skills to teach in China."

12. From in or about December 2004 until in or about March 2014, when he was fired by Company C, HUANG stole proprietary and confidential information, including trade secret information and other intellectual property belonging to Government Research Facility A and Companies B and C with the intent to use the stolen information for the economic benefit of himself, Handan-Sinbo, and others.

13. From in or about 2014 until in or about the time of his arrest, HUANG intended to use, attempted to use, and used in China the confidential and proprietary information, including trade secret information and other intellectual property, that he stole from Government Research Facility A and Companies B and C.

ACTS IN FUTHERANCE OF THE SCHEME

A. HUANG Stole Intellectual Property from the United States

14. HUANG worked at Government Research Facility A as a chemical engineer from in or about December 2004 through June 2008. Among other projects, HUANG worked on fuel cell technology to improve the efficiency and functionality of U.S. military vehicles.

15. At the beginning of his employment with Government Research Facility A, HUANG signed a Non-Disclosure Agreement with the Facility, in which he agreed, among other things, not to disclose proprietary or business sensitive information to others, and not to use such information for his own or another's benefit either during his employment or thereafter.

16. Sometime during his employment with Government Research Facility A, HUANG began stealing intellectual property from the Facility, including but not limited to research on military vehicle fuel cells.

17. For example, after business hours on or about June 16, 2008, after accepting a job with Company B, HUANG emailed himself multiple confidential and proprietary documents from his government email account at Government Research Facility A to a personal email account. Among the confidential and proprietary information HUANG stole was U.S military technology related to military vehicle fuel cells.

18. After stealing Government Research Facility A confidential and proprietary intellectual property, HUANG resigned from the Facility. Before leaving Government Research

Facility A, however, HUANG signed an additional confidentiality agreement falsely stating he that had not taken any property from the Facility.

B. HUANG Stole Intellectual Property from Company B

19. After he left Government Research Facility A, HUANG began work for Company B as a staff engineer, working primarily on projects involving vehicle engine catalysts.

20. As part of the hiring process with Company B, HUANG signed a confidentiality agreement with Company B in which he agreed, among other things, that he would not disclose any confidential or proprietary information of Company B either during or after his employment with Company B to anyone and that upon his termination from Company B he would return all confidential or proprietary information.

21. Sometime during his employment with Company B, HUANG began stealing Company B's trade secrets. Among the many trade secrets HUANG stole were catalyst research relating to propane to propene dehydrogenation, benzene hydrogenating, copper zeolite, and copper chabazite.

22. For example, on or about January 23, 2012, after accepting a job with Company C, HUANG emailed himself multiple documents containing confidential and proprietary information from Company B. As with the information he stole from Government Research Facility A, HUANG emailed these documents from his work email address at Company B to his personal email address after business hours.

23. In or about February 2012, HUANG resigned from Company B to take a job at Company C. Before leaving Company B, HUANG signed an additional confidentiality agreement falsely stating he that had not taken any trade secrets or property from Company B.

24. In total, HUANG stole more than 500 documents containing confidential and proprietary information, including trade secret information, of Company B, related to more than 30 different products with research and development costs associated therewith of more than \$65 million.

C. HUANG Stole Intellectual Property From Company C

25. In or about February 2012, HUANG began working for Company C, in Charlotte, North Carolina, as catalyst manager, focusing on the regeneration of power plant catalysts. As part of the hiring process with Company C, HUANG signed a confidentiality agreement in which he agreed, among other things, to hold in strictest confidence and not disclose or use, any of Company C's proprietary or confidential information.

26. During his employment with Company C, HUANG stole Company C's confidential and proprietary information, including trade secret information. Among the many trade secrets HUANG stole were chemical formulas for the regeneration of catalysts, processes and procedures for the treatment of waste water, marketing information, and lab designs.

27. Company C investigated and subsequently discovered HUANG's theft of confidential and proprietary information, including trade secrets, after he disappeared during a business trip in China and then lied to Company C about his whereabouts during a subsequent trip.

28. After discovering his theft of trade secrets in or about March 2014, Company C fired HUANG.

29. In total, HUANG stole more than 100 documents containing trade secret, confidential, and proprietary information of Company C, with research and development costs associated therewith of \$25 million.

D. HUANG'S Uses of Stolen Intellectual Property

30. In or about July 2012, HUANG incorporated H&Z in North Carolina with others known and unknown to help facilitate his theft of intellectual property and efforts to utilize that stolen intellectual property in China.

31. On or before April 2013, while still working for Company C, HUANG began negotiating with various Chinese companies to bring various catalyst technologies to China. As part of his marketing efforts, HUANG used Company B and C's trade secrets.

32. As part of HUANG's efforts to begin doing business in China, while still employed at Company C, HUANG met with various government officials within the Communist Party of the People's Republic of China. In or about April 2013, HUANG, on behalf of H&Z and others, finalized negotiations with Chinese Company D to form the joint venture Handan-Sinbo for the research and development of catalyst technology in China. However, because of Chinese regulations, the parties then entered into one or more partnerships. As part of the deal, Chinese Company D was responsible for providing all the capital and HUANG was responsible for providing the technology, including the intellectual property that HUANG had stolen.

33. In or about April 2014, H&Z and Chinese Company D formally created a partnership, and HUANG moved back to China to work for the newly created company. HUANG took all the stolen confidential and proprietary information, including trade secret information, of Government Research Facility A and Companies B and C with him to China.

34. From in or about April 2014 to May 2015, HUANG worked for the partnership created between H&Z and Chinese Company D in a managerial role. HUANG used the stolen trade secrets in China to assist his personal goals as well as the business interests of Handan-Sinbo.

35. Upon attaining his goals first annunciated in 2003, HUANG recounted his accomplishments of stealing U.S. intellectual property and bringing it to China in a document he titled, "Trip of Dream Realization." In the document, translated from Chinese, HUANG states in sum and substance: "Throughout these 16 years, I always have a dream of returning to China to develop my ambition. In order to realize this dream, I have worked in US national research academies [laboratories], largest chemical companies in the world. I have also worked in small companies in the US. My goal was to learn, digest, accumulate, and make preparations for realizing the dream. . . Consequently, I started scheming, planning that last for close to 2 years, and returned to China formally in this year, and initiated my own 'Trip of Dream Realization'. . . As the main thrust during the country's development, it is necessary an obligatory for our generation to fulfill our share of responsibility in contributing towards the societal progress of China."

COUNT ONE
(Theft of Trade Secrets)
(18 U.S.C. § 1832)

36. The United States Attorney realleges and incorporates by reference herein the allegations contained in paragraphs 1 through 37 of the Bill of Information, and further alleges:

37. From in or about 2008 through in or about May 2015, within the Western District of North Carolina and elsewhere, the defendant,

XIWEN HUANG,

with the intent to covert a trade secret to the economic benefit of someone other than its owner, did knowingly and intentionally steal and without authorization appropriate, take, carry away, copy, duplicate, download, upload, replicate, transmit, deliver, send, mail, communicate, convey, and possess catalyst and catalyst-related trade secrets knowing the same to have been stolen or appropriated, obtained or converted without authorization from Company B and Company C, as more fully described in preceding paragraphs, and which is related to and included in a product that is produced for and placed in interstate and foreign commerce, knowing that the trade secrets had been stolen appropriated, obtained, and converted without authorization, and intending and knowing that the offense would injure the owners of the trade secrets.

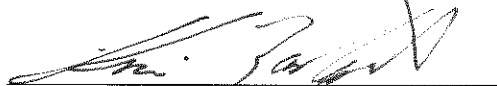
In violation of Title 18, United States Code, Section 1832(a)(1).

NOTICE OF FORFEITURE

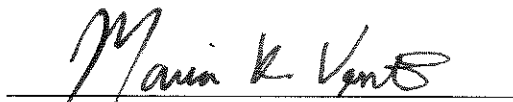
38. Notice is hereby given of 18 U.S.C. § 982 and 28 U.S.C. § 2461(c). Under Section 2461(c), criminal forfeiture is applicable to any offenses for which forfeiture is authorized by any other statute, including but not limited to 18 U.S.C. § 981 and all specified unlawful activities listed or referenced in 18 U.S.C. § 1956(c)(7), which are incorporated as to proceeds by Section 981(a)(1)(C). The following property is subject to forfeiture in accordance with Section 982 and/or 2461(c):

- a. All property which constitutes or is derived from proceeds of the violations set forth in this Bill of Information; and
- b. If, as set forth in 21 U.S.C. § 853(p), any property described in (a) cannot be located upon the exercise of due diligence, has been transferred or sold to, or deposited with, a third party, has been placed beyond the jurisdiction of the court, has been substantially diminished in value, or has been commingled with other property which cannot be divided without difficulty, all other property of the defendant/s to the extent of the value of the property described in (a).

JILL WESTMORELAND ROSE
ACTING UNITED STATES ATTORNEY



KEVIN ZOLOT
ASSISTANT UNITED STATES ATTORNEY



MARIA K. VENTO
ASSISTANT UNITED STATES ATTORNEY